

Kingston District Council

CWMS Economic Impact and Benefit Cost Assessment – June 2025

Kingston District Council



hudson howells



Source: Kingston District Council Website

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Front cover source: Kingston District Council Website

Executive Summary

The Kingston Community Wastewater Management System (CWMS) expansion project has been identified as a high statewide priority to address health and environmental concerns in the Kingston District. The project aims to expand the existing CWMS network into the Wyomi, Pinks Beach, and Rosetown areas, enhancing liveability and stimulating development. Key components of the project include upgrading lagoons, increasing storage capacity, and installing new and upgraded pump stations and trunk infrastructure, enabling the connection of up to 657 properties.

The economic impact assessment conducted for this project highlights significant benefits. During the construction phase, the CWMS project is estimated to contribute \$25.8 million to South Australia's Gross State Product (GSP) and support for 157 full-time equivalent (FTE) jobs. Regionally, the project will contribute \$13.6 million to Gross Regional Product (GRP) and support 76 FTE jobs.

Once operational, the project will continue to deliver economic benefits. Housing construction associated with the CWMS expansion is estimated to contribute \$6.5 million to South Australia's GSP and support for 40 FTE jobs annually for up to 15 years. Regionally, this will translate to a \$3.5 million contribution to GRP and 19 FTE jobs. After 15 years, increased spending by new residents and holiday makers is estimated to contribute \$4.9 million to South Australia's GSP and support for 36 FTE jobs annually. Regionally, this will translate to a \$3.4 million contribution to GRP and 22 FTE jobs annually.

The benefit-cost assessment indicates positive Benefit Cost Ratios (BCRs) of 1.87 and 1.12 for South Australia and the Kingston Council region respectively, and significant 50-year Community Net Present Values (NPVs) for both South Australia (\$83.9 million) and the Kingston Council region (\$11.3 million). The project is expected to generate broader socio-economic benefits, including increased tourism spending and property value uplift.

In summary, the Kingston CWMS expansion project is poised to deliver substantial economic and community benefits, addressing critical health and environmental concerns while fostering regional development and economic growth.

Section 1: Introduction and Project Objectives

The Kingston Community Wastewater Management System (CWMS) expansion has been identified as a high statewide priority project to address health and environmental concerns, resulting from the many bores in the township area, inhibiting development for much needed new housing. The expansion project will look to expand the existing CWMS network into the Wyomi, Pinks Beach and Rosetown areas to further enhance liveability and stimulate development at an accelerated rate and address groundwater environment and human health concerns. The project will include an upgrade of the existing lagoons, storage capacity and new and upgraded pumpstations and associated trunk infrastructure, which will enable connection of approved sub-divisions of up to 657 properties.

The key objectives of this assessment are to determine the economic impacts and benefit cost ratio (BCR) of the Kingston Community Wastewater Management System (CWMS) Expansion project. This includes:

- An **Economic Impact Assessment** detailing the Gross State Product (GSP), Gross Regional Product (GRP) and direct/indirect (multiplier) jobs associated with the CWMS Expansion project.
- An **Economic Impact Assessment** detailing the Gross State Product (GSP), Gross Regional Product (GRP) and direct/indirect (multiplier) jobs associated with economic activity supported by the CWMS Expansion project including, for example, additional housing infrastructure (roads, footpaths, power, water, etc.), additional housing construction and additional retail spending.
- A **Community Benefit/Cost Assessment** including the estimation of a project BCR and Net Present Value (relative to the cost estimates) over the life of additional economic activity. In addition to benefits associated with the construction and ongoing operational costs, broader socio-economic benefits will be included such as additional tourism spend and property shadow effects.

Section 2: Study Methodology

This Economic Impact Assessment details the Gross State Product (GSP), Gross Regional Product (GRP) and direct/indirect (multiplier) jobs associated with the project during construction and when fully operational. Hudson Howells' Input Output Models for South Australia and the Kingston District Council Region have been used as the basis for estimating these economic impacts.

A Microsoft Excel model was developed to assess the economic impacts of the project. The model and multipliers are based on:

- The 2020/21 ABS national table based on the national 2021 Census.
- The tables have been created using the location method and data from the South Australian Accounts and Labour Force Survey.

The assessed economic impacts include the direct value added (Gross State Product) and employment impacts, plus the flow through effects as estimated using the model multipliers, with employment impacts adjusted for inflation since 2020/21.

Value added is defined as the extent to which the local economy adds value to the product or services supplied, and essentially is the returns to labour and capital in the region for that activity – it represents the incomes to labour and capital. It is consistent with the predominant national measure of economic activity of Gross Domestic Product (GDP), Gross State Product (GSP) or Gross Regional Product (GRP). The value added and employment impacts have been measured at two levels. Firstly, the **direct impact** – the value added, and employment contribution or share associated directly with the expenditure (e.g. the labour and profits involved in the activity). Secondly, the indirect or multiplier impact – i.e. that associated with the suppliers to the project, the **industrial impact**, and the spend of employee wages, the **consumption impact**.

The Benefit Cost Assessment includes all economic (e.g. increased GSP), financial (e.g. lost/gained retail revenue) and community (e.g. property valuation uplift) benefits and costs to determine Benefit Cost Ratios and NPVs for the State and the Kingston Council region.

Section 3: Key Economic Modelling Assumptions

Tables 1 opposite contains the key economic modelling assumptions supporting the economic impact assessment and benefit cost assessment.

CWMS Construction Cost is based on the WGA revised costs as advised by Council. The **New Housing Construction** assumptions are based on the total number of vacant allotments in the project area as advised by Council and the Holmes Dyer Kingston Housing Research (2024) number and value of building approvals per annum.

The **Increased Spending by New Residents/Holiday Makers** assumptions are based on the split of permanent and away postcodes as advised by Council, Statista average annual spend per household and an assumed 20% occupancy rate for holiday/away households.

The **Value of Developed and Undeveloped Properties** in the project area were supplied by Council. The estimated **Value of Property Uplift** is a Hudson Howells assumption based on other projects and case studies.

Hudson Howells’ Input-Output Tables have been used for estimating GSP and FTE job impacts, and a Microsoft Excel model has been developed to estimate all costs and benefits, 30-year NPVs and BCRs (BCRs).

Table 1

CWMS Construction Costs	\$24,410,000
New Housing Construction	
Additional houses to be constructed	193
Years of housing construction - 13 p.a.	14.85
Average number of houses to be constructed per annum	13.00
Average house and land construction cost	\$477,000
Increased Spending by New Residents/Holiday Makers	
Number of New Houses Per Annum	13
Current % of Permanent Postcodes/Houses	27.00%
Current % of Away Postcodes/Houses	73.00%
Potential Number of New Permanent Households Per Annum	4
Potential Number of Holiday/Away Households Per Annum	9
Average Spend per Annum by New Permanent Households	\$44,892
Average Spend per Annum by Holiday/Away Households	\$8,978
Additional Business Revenue Per Annum for 15 Years	\$242,713
Improved Place and Liveability Effects	
Total Value of Residential (Including Undeveloped) Rateable Properties Effected	\$183,065,000
Value of Property Uplift	1.00%
Total Benefit	\$1,830,650
Discount Rate	4.00%

Section 4: Summary of Results

Table 2 below summarises the outcomes of the economic impact and benefit cost assessments for South Australia and the Kingston District Council region:

Table 2

	South Australia	Kingston Council
Community 50 Year Benefit Cost Ratio (Total NPV Benefits/Total NPV Costs)	1.87	1.12
Project Net Present Value (NPVC - Costs Only)	\$96,390,845	\$96,390,845
Community Net Present Value of Costs and Benefits (NPVCB)	\$83,866,330	\$11,298,426
Additional Business Revenue Per Annum for 15 Years	\$242,713	\$242,713
Total Additional Business Revenue Per Annum After 15 Years	\$3,640,696	\$3,640,696
CWMS Construction Contribution to Gross State and Regional Product	\$25,776,960	\$13,596,370
Housing Construction Contribution to Gross State and Regional Product for 15 Years	\$6,546,560	\$3,453,062
CWMS Construction FTE Jobs Supported	156.79	75.89
CWMS Operational FTE Jobs Supported Per Annum	0.34	0.00
Additional Visitor Supported Jobs Per Annum	2.37	1.47
Additional Visitor Supported Jobs Per Annum After 15 Years	35.60	21.99
Additional Visitor Spending Contribution to Gross State Product Per Annum	\$324,265	\$227,422
Additional Visitor Spending Contribution to Gross State Product Per Annum After 15 Years	\$4,863,970	\$3,411,332
Proport Value Uplift	\$1,830,650	\$1,830,650

Based on the above modelling results, the CWMS project is estimated to deliver positive BCRs and Community Net Present Values.

Section 5: Detailed Economic Impacts – Construction Phase

Table 3 and Graph 1 opposite contain the estimated economic impacts associated with the project construction based on an estimated capital cost of \$24.41 million and ongoing 15 years housing construction of \$6.2 million per annum.

In summary, it is estimated that the CWMS Construction will contribute \$25.8 million to South Australia’s Gross State Product (\$13.6 million regionally) and will support a total of 157 full time equivalent jobs (76 regionally) during the construction phase.

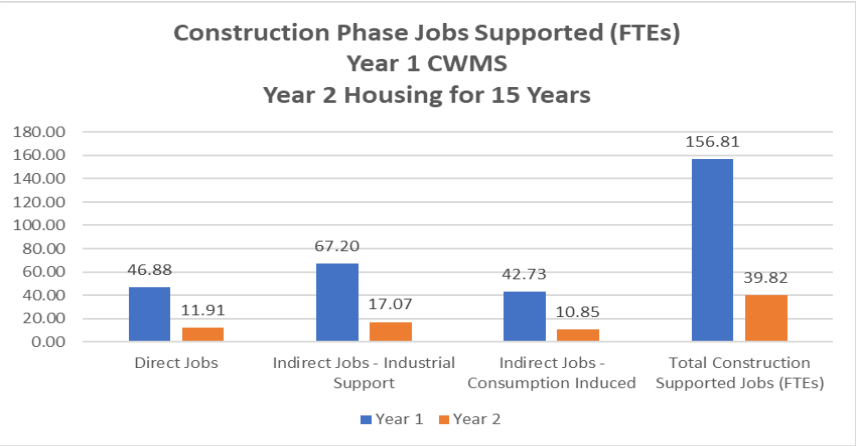
There is an estimated 47 Direct FTE jobs associated with this construction activity, mostly on-site. The construction phase will support indirect industrial and consumption jobs in addition to the direct jobs. **Industrial support**, for example suppliers to the project such as materials and services, is estimated to contribute an additional 67 FTE jobs. **Consumption induced**, for example jobs supported by the spending of employee wages, is estimated to contribute an additional 43 FTE jobs.

From Year 2, Housing Construction will contribute \$6.5 million to South Australia’s Gross State Product (\$3.5 million regionally) and will support a total of 40 full time equivalent jobs (19 regionally).

Table 3

	Year 1	Year 2
Value Added or Contribution to Gross State Product	\$25,776,960	\$6,546,560
Direct Jobs	46.88	11.91
Indirect Jobs - Industrial Support	67.20	17.07
Indirect Jobs - Consumption Induced	42.73	10.85
Total Construction Supported Jobs (FTEs)	156.81	39.82

Graph 1



[illegible]

Section 7: Detailed Economic and Benefit Cost Modelling – Kingston Council

The following table details the economic and benefit cost modelling for the Kingston Council region. The Net Annual Benefit/Cost becomes positive at year 14 based on increasing spending by new households.

Table 5

[illegible]